

UTC Project Information	
Project Title	Comparing and Combining Existing and Emerging Data Collection and Modeling Strategies in Support of Signal Control Optimization and Management (Project M2)
University	Florida International University
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Funding Source(s) and Amounts Provided (by each agency or organization)	STRIDE: \$123,211 FDOT: \$64,655 UAB: \$58,556
Total Project Cost	\$123,211
Agency ID or Contract Number	69A3551747104
Start and End Dates	September 1, 2018 – August 31, 2020
Brief Description of Research Project	For decades, traffic signal management agencies have used signal timing optimization tools combined with fine-tuning of signal timing based on field observations in their updates of time-of-day signal timing plans. These traditional signal optimization methods and tools use very limited amount of data and depend on default values in the signal timing optimization/simulation tools to estimate network performance under different signal optimization strategies. In recent years, new data collection technologies are emerging including high resolution controller data, more advanced detection technologies such as video image detection that are based on vehicle tracking and possible integration with microwave detectors, automatic-vehicle based identification technologies, third party crowdsourcing data, connected vehicles, and connected automated vehicles data. The objective of the proposed study is to propose methods and algorithms to combine data collected from existing and emerging sources with enhanced models and optimization algorithms to optimize and manage signal operations. The results from applying the developed methods and algorithms will be compared with

	traditional signal timing and optimization methods currently used by transportation agencies.
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	Not available. Research is in progress.
Impacts/Benefits of Implementation (actual, not anticipated)	Not available. Research is in progress.
Web Links <ul style="list-style-type: none">• Reports• Project website	https://stride.ce.ufl.edu/project-m2/